

#5



1

SEQUENCE LISTING

<110> JIAO, JIN-AN  
WONG, HING C.

<120> ANTIBODIES FOR INHIBITING BLOOD COAGULATION AND METHODS  
OF USE THEREOF

<130> 71758/46943-CIP2

<140> 09/990,586

<141> 2001-11-21

<150> 09/293,854

<151> 1999-04-16

<160> 102

<170> PatentIn Ver. 2.1

<210> 1

<211> 321

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1) .. (321)

<400> 1

gac att cag atg acc cag tct cct gcc tcc cag tct gca tct ctg gga	48
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly	
1 5 10 15	
gaa agt gtc acc atc aca tgc ctg gca agt cag acc att gat aca tgg	96
Glu Ser Val Thr Ile Thr Cys Leu Ala Ser Gln Thr Ile Asp Thr Trp	
20 25 30	
tta gca tgg tat cag cag aaa cca ggg aaa tct cct cag ctc ctg att	144
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Gln Leu Leu Ile	
35 40 45	
tat gct gcc acc aac ttg gca gat ggg gtc cca tca agg ttc agt ggc	192
Tyr Ala Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly	
50 55 60	
agt gga tct ggc aca aaa ttt tct ttc aag atc agc agc cta cag gct	240
Ser Gly Ser Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala	
65 70 75 80	
gaa gat ttt gta aat tat tac tgt caa caa gtt tac agt tct cca ttc	288
Glu Asp Phe Val Asn Tyr Tyr Cys Gln Gln Val Tyr Ser Ser Pro Phe	
85 90 95	
acg ttc ggt gct ggg acc aag ctg gag ctg aaa	321
Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys	
100 105	

<210> 2  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 2  
 Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly  
 1 5 10 15  
 Glu Ser Val Thr Ile Thr Cys Leu Ala Ser Gln Thr Ile Asp Thr Trp  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Gln Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala  
 65 70 75 80  
 Glu Asp Phe Val Asn Tyr Tyr Cys Gln Gln Val Tyr Ser Ser Pro Phe  
 85 90 95  
 Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys  
 100 105

<210> 3  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)..(351)

<400> 3  
 gag atc cag ctg cag cag tct gga cct gag ctg gtg aag cct ggg gct 48  
 Glu Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
 1 5 10 15  
 tca gtg cag gta tcc tgc aag act tct ggt tac tca ttc act gac tac 96  
 Ser Val Gln Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Asp Tyr  
 20 25 30  
 aac gtg tac tgg gtg agg cag agc cat gga aag agc ctt gag tgg att 144  
 Asn Val Tyr Trp Val Arg Gln Ser His Gly Lys Ser Leu Glu Trp Ile  
 35 40 45  
 gga tat att gat cct tac aat ggt att act atc tac gac cag aac ttc 192  
 Gly Tyr Ile Asp Pro Tyr Asn Gly Ile Thr Ile Tyr Asp Gln Asn Phe  
 50 55 60

aag ggc aag gcc aca ttg act gtt gac aag tct tcc acc aca gcc ttc 240  
 Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Thr Thr Ala Phe  
 65 70 75 80

atg cat ctc aac agc ctg aca tct gac gac tct gca gtt tat ttc tgt 288  
 Met His Leu Asn Ser Leu Thr Ser Asp Asp Ser Ala Val Tyr Phe Cys  
 85 90 95

gca aga gat gtg act acg gcc ctt gac ttc tgg ggc caa ggc acc act 336  
 Ala Arg Asp Val Thr Thr Ala Leu Asp Phe Trp Gly Gln Gly Thr Thr  
 100 105 110

ctc aca gtc tcc tca 351  
 Leu Thr Val Ser Ser  
 115

<210> 4  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 4  
 Glu Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
 1 5 10 15

Ser Val Gln Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Asp Tyr  
 20 25 30

Asn Val Tyr Trp Val Arg Gln Ser His Gly Lys Ser Leu Glu Trp Ile  
 35 40 45

Gly Tyr Ile Asp Pro Tyr Asn Gly Ile Thr Ile Tyr Asp Gln Asn Phe  
 50 55 60

Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Thr Thr Ala Phe  
 65 70 75 80

Met His Leu Asn Ser Leu Thr Ser Asp Asp Ser Ala Val Tyr Phe Cys  
 85 90 95

Ala Arg Asp Val Thr Thr Ala Leu Asp Phe Trp Gly Gln Gly Thr Thr  
 100 105 110

Leu Thr Val Ser Ser  
 115

<210> 5  
 <211> 7  
 <212> PRT  
 <213> Homo sapiens

<400> 5  
 Leu Ala Ser Gln Thr Ile Asp  
 1 5

<210> 6  
 <211> 7  
 <212> PRT  
 <213> Homo sapiens

<400> 6  
 Ala Ala Thr Asn Leu Ala Asp  
       1                  5

<210> 7  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 7  
 Gln Gln Val Tyr Ser Ser Pro Phe Thr  
       1                  5

<210> 8  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 8  
 Thr Asp Tyr Asn Val Tyr  
       1                  5

<210> 9  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 9  
 Tyr Ile Asp Pro Tyr Asn Gly Ile Thr Ile Tyr Asp Gln Asn Phe Lys  
       1                  5                  10                  15

Gly

<210> 10  
 <211> 8  
 <212> PRT  
 <213> Homo sapiens

<400> 10  
 Asp Val Thr Thr Ala Leu Asp Phe  
       1                  5

<210> 11  
 <211> 21  
 <212> DNA  
 <213> Homo sapiens

<400> 11  
 ctggcaagtc agaccattga t 21

<210> 12  
 <211> 21  
 <212> DNA  
 <213> Homo sapiens

<400> 12  
 gctgccacca acttggcaga t 21

<210> 13  
 <211> 28  
 <212> DNA  
 <213> Homo sapiens

<400> 13  
 caacaagttt acagttctcc attcacgt 28

<210> 14  
 <211> 18  
 <212> DNA  
 <213> Homo sapiens

<400> 14  
 actgactaca acgtgtac 18

<210> 15  
 <211> 51  
 <212> DNA  
 <213> Homo sapiens

<400> 15  
 tatattgatc cttacaatgg tattactatc tacgaccaga acttcaaggg c 51

<210> 16  
 <211> 24  
 <212> DNA  
 <213> Homo sapiens

<400> 16  
 gatgtgacta cggcccttga cttc 24

<210> 17  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 17 gcacctccag atgttaactg ctc	23
<210> 18 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Primer	
<400> 18 gaartavccc ttgaccaggc	20
<210> 19 <211> 35 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Primer	
<400> 19 ggaggcggcg gttctgacat tgtgmtgwcw cartc	35
<210> 20 <211> 45 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Primer	
<400> 20 atttcaggcc cagccggcca tggccgargt ycarctkcar caryc	45
<210> 21 <211> 33 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Primer	
<400> 21 cccggggccac catgkccccw rctcagytyc tkg	33
<210> 22 <211> 35 <212> DNA <213> Artificial Sequence	

<220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 22  
 cccgggccac catggratgs agctgkgtma tsctc 35  
  
 <210> 23  
 <211> 52  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 23  
 atatactcgc gacagctaca ggtgtccact ccgagatcca gctgcagcag tc 52  
  
 <210> 24  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 24  
 gacctgaatt ctaaggagac tgtgagagtg g 31  
  
 <210> 25  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 25  
 ttaattgata tccagatgac ccagtcctcc 29  
  
 <210> 26  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 26  
 taatcggtcg aaaagtgtac ttacgtttca gctccagctt ggtcc 45  
  
 <210> 27  
 <211> 38

<212> PRT

<213> Homo sapiens

<400> 27

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser  
 20 25 30  
 Pro Gln Leu Leu Ile Tyr  
 35

<210> 28

<211> 42

<212> PRT

<213> Homo sapiens

<400> 28

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ser  
 1 5 10 15  
 Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys  
 20 25 30  
 Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 35 40

<210> 29

<211> 44

<212> PRT

<213> Homo sapiens

<400> 29

Gln Ile Gln Leu Val Gln Ser Gly Gly Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
 20 25 30  
 Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly  
 35 40

<210> 30

<211> 43

<212> PRT

<213> Homo sapiens

<400> 30

Lys Ala Thr Leu Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu  
 1 5 10 15  
 Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg  
 20 25 30



Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
           35                                  40

<210> 31  
 <211> 37  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 31  
 tttcgtacgt cttgtcccag atccagctgc agcagtc 37

<210> 32  
 <211> 43  
 <212> DNA  
 <213> Homo sapiens

<400> 32  
 agcgaattct gaggagactg tgacagtggg gccttgccc cag 43

<210> 33  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 33  
 gtgaggcaga gccctggaaa gggccttgag tggattgg 38

<210> 34  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 34  
 ccaatccact caaggccctt tccagggctc tgcctcac 38

<210> 35  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 35  
 gcattctcaac agcctgagat ctgaagacac tgcagtttat ttctgtg 47

<210> 36  
 <211> 43  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 36  
 ctgcagtgtc ttcagatctc aggctgttga gatgcatgaa ggc 43

<210> 37  
 <211> 43  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 37  
 gtcttcagat ctcaggctgc tgagctccat gaaggctgtg gtg 43

<210> 38  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 38  
 tacgactcac tatagggcga attgg 25

<210> 39  
 <211> 43  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 39  
 ctgttgacaa gtctaccagc acagcctaca tggagctcag cag 43

<210> 40  
 <211> 43  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 40

ctgctgagct ccatgtaggc tgtgctggta gacttgtcaa cag 43

<210> 41

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 41

gcactgaagc cccaggcttc accagctcac ctccagactg ctgcagc 47

<210> 42

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 42

ctggggcttc agtgcgggta tcttgcaagg cttctgggta ctcatccac 49

<210> 43

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 43

tcgtacgtct tgtcccagat ccagctgggtg cagtctggag gtgagc 46

<210> 44

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 44

gcactgaagc cccaggcttc ttcacctcac ctccagactg cacc 44

<210> 45

<211> 32

<212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 45  
 gcagtctgga cctgagctga agaagcctgg gg 32

<210> 46  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 46  
 ccccaggctt cttcagctca ggtccagact gc 32

<210> 47  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 47  
 gctggtgcag tctggacctg aggtgaagaa gcc 33

<210> 48  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 48  
 ggcttcttca cctcaggctcc agactgcacc agc 33

<210> 49  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 49  
 gcagtctgga cctgagctgg tgaagcctgg ggcttc 36

<210> 50  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 50  
 gaagccccag gcttcaccag ctcaggtcca gactgc 36  
  
 <210> 51  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 51  
 cagtctggac ctgaggtggt gaagcctggg 30  
  
 <210> 52  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 52  
 cccaggttc accacctcag gtccagactg 30  
  
 <210> 53  
 <211> 42  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 53  
 ttcgaaaagt gtacttacgt ttgatctcca gcttggtccc ag 42  
  
 <210> 54  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 54  
 accggtgata tccagatgac ccagtctcc 29

<210> 55  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 55  
 ggtagcatg gtatctgcag aaaccaggg 29

<210> 56  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 56  
 ccctggtttc tgcagatacc atgctaacc 29

<210> 57  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 57  
 tacgactcac tatagggcga attgg 25

<210> 58  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 58  
 ccacagatgc agacagggag gcaggagact g 31

<210> 59  
 <211> 51  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 59  
 ttcgaaaagt gtacttacgt ttgatctcca gcttggtacc agcaccgaac g 51

<210> 60  
 <211> 40  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 60  
 cctgtctgca tctgtgggag ataggggtcac catcacatgc 40

<210> 61  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 61  
 gatctccagc ttggtaccct gaccgaacgt gaatgg 36

<210> 62  
 <211> 40  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 62  
 gtaggctgct gatcgtgaaa gaaaagtctg tgccagatcc 40

<210> 63  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 63  
 cacgatcagc agcctacagc ctgaagattt tgtaaattat tactgtc 47

<210> 64  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 64  
 gcagcctaca gcctgaagat ttgcaactt attactgtca acaag 45  
  
 <210> 65  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 65  
 cttgttgaca gtaataagtt gcaaaatctt caggctgtag gctgc 45  
  
 <210> 66  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 66  
 cagcagccta cagcctgaag attttgcaaa ttattactgt caac 44  
  
 <210> 67  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 67  
 gttgacagta ataatttgca aaatcttcag gctgtaggct gctg 44  
  
 <210> 68  
 <211> 40  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 68  
 cagtggatct ggcacaaagt tttctttcac gatcagcagc 40  
  
 <210> 69  
 <211> 40



<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 69

gctgctgac gtgaaagaaa actttgtgcc agatccactg

40

<210> 70

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 70

ctgcagaaac cagggcaatc tcctcagctc ctg

33

<210> 71

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 71

caggagctga ggagattgcc ctggtttctg cag

33

<210> 72

<211> 79

<212> PRT

<213> Homo sapiens

<400> 72

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly  
1 5 10 15

Glu Ser Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ser  
20 25 30

Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser  
35 40 45

Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala Glu Asp Phe  
50 55 60

Val Asn Tyr Tyr Cys Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys  
65 70 75

<210> 73

<211> 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 73

```

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly
 1             5             10             15

Glu Ser Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ser
          20             25             30

Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
          35             40             45

Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala Glu Asp Phe
          50             55             60

Val Asn Tyr Tyr Cys Phe Gly Ala Gly Thr Lys Leu Glu Ile Lys
          65             70             75

```

&lt;210&gt; 74

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 74

```

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly
 1             5             10             15

Glu Ser Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser
          20             25             30

Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
          35             40             45

Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala Glu Asp Phe
          50             55             60

Val Asn Tyr Tyr Cys Phe Gly Ala Gly Thr Lys Leu Glu Ile Lys
          65             70             75

```

&lt;210&gt; 75

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 75

```

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
 1             5             10             15

Asp Arg Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser
          20             25             30

Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
          35             40             45

```

Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala Glu Asp Phe  
 50 55 60

Val Asn Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 65 70 75

<210> 76

<211> 79

<212> PRT

<213> Homo sapiens

<400> 76

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly  
 1 5 10 15

Glu Ser Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser  
 20 25 30

Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser  
 35 40 45

Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala Glu Asp Phe  
 50 55 60

Val Asn Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 65 70 75

<210> 77

<211> 79

<212> PRT

<213> Homo sapiens

<400> 77

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly  
 1 5 10 15

Glu Ser Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser  
 20 25 30

Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser  
 35 40 45

Gly Thr Asp Phe Ser Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe  
 50 55 60

Val Asn Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 65 70 75

<210> 78

<211> 79

<212> PRT

<213> Homo sapiens

&lt;400&gt; 78

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly  
 1 5 10 15  
 Glu Ser Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser  
 20 25 30  
 Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser  
 35 40 45  
 Gly Thr Asp Phe Ser Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe  
 50 55 60  
 Ala Thr Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 65 70 75

&lt;210&gt; 79

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 79

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser  
 20 25 30  
 Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser  
 35 40 45  
 Gly Thr Asp Phe Ser Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe  
 50 55 60  
 Ala Thr Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 65 70 75

&lt;210&gt; 80

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 80

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser  
 20 25 30  
 Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser  
 35 40 45  
 Gly Thr Asp Phe Ser Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe  
 50 55 60

Ala Asn Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 65 70 75

<210> 81  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 81  
 Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Lys Ser  
 20 25 30  
 Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser  
 35 40 45  
 Gly Thr Lys Phe Ser Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe  
 50 55 60  
 Ala Asn Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 65 70 75

<210> 82  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 82  
 Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 20 25 30  
 Pro Gln Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser  
 35 40 45  
 Gly Thr Lys Phe Ser Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe  
 50 55 60  
 Ala Asn Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 65 70 75

<210> 83  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 83  
 Glu Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
 1 5 10 15

Ser Val Gln Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Trp Val  
                   20                  25                  30

Arg Gln Ser His Gly Lys Ser Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                  40                  45

Thr Val Asp Lys Ser Ser Thr Thr Ala Phe Met His Leu Asn Ser Leu  
       50                  55                  60

Thr Ser Asp Asp Ser Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
       65                  70                  75                  80

Thr Thr Leu Thr Val Ser Ser  
                   85

<210> 84

<211> 87

<212> PRT

<213> Homo sapiens

<400> 84

Gln Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
       1                  5                  10                  15

Ser Val Gln Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Trp Val  
                   20                  25                  30

Arg Gln Ser His Gly Lys Ser Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                  40                  45

Thr Val Asp Lys Ser Ser Thr Thr Ala Phe Met His Leu Asn Ser Leu  
       50                  55                  60

Thr Ser Asp Asp Ser Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
       65                  70                  75                  80

Thr Thr Val Thr Val Ser Ser  
                   85

<210> 85

<211> 87

<212> PRT

<213> Homo sapiens

<400> 85

Gln Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
       1                  5                  10                  15

Ser Val Gln Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Trp Val  
                   20                  25                  30

Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                  40                  45

Thr Val Asp Lys Ser Ser Thr Thr Ala Phe Met His Leu Asn Ser Leu  
       50                  55                  60

Thr Ser Asp Asp Ser Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
 65 70 75 80

Thr Thr Val Thr Val Ser Ser  
 85

<210> 86  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 86  
 Gln Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
 1 5 10 15

Ser Val Gln Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Trp Val  
 20 25 30

Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
 35 40 45

Thr Val Asp Lys Ser Ser Thr Thr Ala Phe Met His Leu Asn Ser Leu  
 50 55 60

Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
 65 70 75 80

Thr Thr Val Thr Val Ser Ser  
 85

<210> 87  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 87  
 Gln Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
 1 5 10 15

Ser Val Gln Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Trp Val  
 20 25 30

Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
 35 40 45

Thr Val Asp Lys Ser Ser Thr Thr Ala Phe Met Glu Leu Ser Ser Leu  
 50 55 60

Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
 65 70 75 80

Thr Thr Val Thr Val Ser Ser  
 85

<210> 88  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 88  
 Gln Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
   1                  5                  10                  15  
 Ser Val Gln Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Trp Val  
           20                  25                  30  
 Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                  40                  45  
 Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
           50                  55                  60  
 Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
   65                  70                  75                  80  
 Thr Thr Val Thr Val Ser Ser  
                   85

<210> 89  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 89  
 Gln Met Gln Leu Gln Gln Ser Gly Gly Glu Leu Val Lys Pro Gly Ala  
   1                  5                  10                  15  
 Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
           20                  25                  30  
 Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                  40                  45  
 Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
           50                  55                  60  
 Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
   65                  70                  75                  80  
 Thr Thr Val Thr Val Ser Ser  
                   85

<210> 90  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 90  
 Gln Ile Gln Leu Val Gln Ser Gly Gly Glu Leu Val Lys Pro Gly Ala  
   1                  5                  10                  15



Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
                   20                  25                  30  
 Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
                   35                  40                  45  
 Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
                   50                  55                  60  
 Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
                   65                  70                  75                  80  
 Thr Thr Val Thr Val Ser Ser  
                                   85

<210> 91  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 91  
 Gln Ile Gln Leu Val Gln Ser Gly Gly Glu Val Lys Lys Pro Gly Ala  
           1                  5                  10                  15  
 Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
                   20                  25                  30  
 Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
                   35                  40                  45  
 Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
                   50                  55                  60  
 Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
                   65                  70                  75                  80  
 Thr Thr Val Thr Val Ser Ser  
                                   85

<210> 92  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 92  
 Gln Ile Gln Leu Val Gln Ser Gly Gly Glu Val Lys Lys Pro Gly Ala  
           1                  5                  10                  15  
 Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
                   20                  25                  30  
 Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
                   35                  40                  45

Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
           50                          55                          60

Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
       65                          70                          75                          80

Thr Thr Val Thr Val Ser Ser  
                           85

<210> 93

<211> 87

<212> PRT

<213> Homo sapiens

<400> 93

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Ala  
       1                          5                          10                          15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
                           20                          25                          30

Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                          40                          45

Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
       50                          55                          60

Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
       65                          70                          75                          80

Thr Thr Val Thr Val Ser Ser  
                           85

<210> 94

<211> 87

<212> PRT

<213> Homo sapiens

<400> 94

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Ala  
       1                          5                          10                          15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
                           20                          25                          30

Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                          40                          45

Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
       50                          55                          60

Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
       65                          70                          75                          80

Thr Thr Val Thr Val Ser Ser  
                           85

<210> 95  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 95  
 Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala  
   1                  5                  10                  15  
 Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
                   20                  25                  30  
 Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                  40                  45  
 Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
       50                  55                  60  
 Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
   65                  70                  75                  80  
 Thr Thr Val Thr Val Ser Ser  
                   85

<210> 96  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 96  
 Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Val Val Lys Pro Gly Ala  
   1                  5                  10                  15  
 Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Trp Val  
                   20                  25                  30  
 Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly Lys Ala Thr Leu  
           35                  40                  45  
 Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu  
       50                  55                  60  
 Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Trp Gly Gln Gly  
   65                  70                  75                  80  
 Thr Thr Val Thr Val Ser Ser  
                   85

<210> 97  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 97

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu  
 1 5 10 15  
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe  
 20 25 30  
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln  
 35 40 45  
 Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser  
 50 55 60  
 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu  
 65 70 75 80  
 Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser  
 85 90 95  
 Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
 100 105

&lt;210&gt; 98

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 98

Glu Phe Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser  
 1 5 10 15  
 Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys  
 20 25 30  
 Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu  
 35 40 45  
 Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu  
 50 55 60  
 Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr  
 65 70 75 80  
 Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val  
 85 90 95  
 Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro  
 100 105 110  
 Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe  
 115 120 125  
 Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val  
 130 135 140  
 Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe  
 145 150 155 160

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro  
 165 170 175  
 Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr  
 180 185 190  
 Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val  
 195 200 205  
 Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala  
 210 215 220  
 Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg  
 225 230 235 240  
 Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly  
 245 250 255  
 Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro  
 260 265 270  
 Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser  
 275 280 285  
 Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln  
 290 295 300  
 Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His  
 305 310 315 320  
 Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 325 330

<210> 99  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 99  
 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu  
 1 5 10 15  
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe  
 20 25 30  
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln  
 35 40 45  
 Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser  
 50 55 60  
 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu  
 65 70 75 80  
 Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser  
 85 90 95

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
 100 105

<210> 100  
 <211> 329  
 <212> PRT  
 <213> Homo sapiens

<400> 100  
 Glu Phe Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys  
 1 5 10 15  
 Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys  
 20 25 30  
 Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu  
 35 40 45  
 Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu  
 50 55 60  
 Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr  
 65 70 75 80  
 Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val  
 85 90 95  
 Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro  
 100 105 110  
 Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys  
 115 120 125  
 Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val  
 130 135 140  
 Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr  
 145 150 155 160  
 Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu  
 165 170 175  
 Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His  
 180 185 190  
 Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys  
 195 200 205  
 Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln  
 210 215 220  
 Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met  
 225 230 235 240  
 Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro  
 245 250 255

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn  
 260 265 270  
 Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu  
 275 280 285  
 Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val  
 290 295 300  
 Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln  
 305 310 315 320  
 Lys Ser Leu Ser Leu Ser Leu Gly Lys  
 325

<210> 101  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 101  
 Tyr Ile Asp Pro Tyr Asn Gly Ile Thr Ile Tyr Asp Gln Asn Leu Lys  
 1 5 10 15  
 Gly

<210> 102  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 102  
 Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly  
 1 5 10 15  
 Glu Ser Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ser  
 20 25 30  
 Pro Gln Leu Leu Ile Tyr  
 35